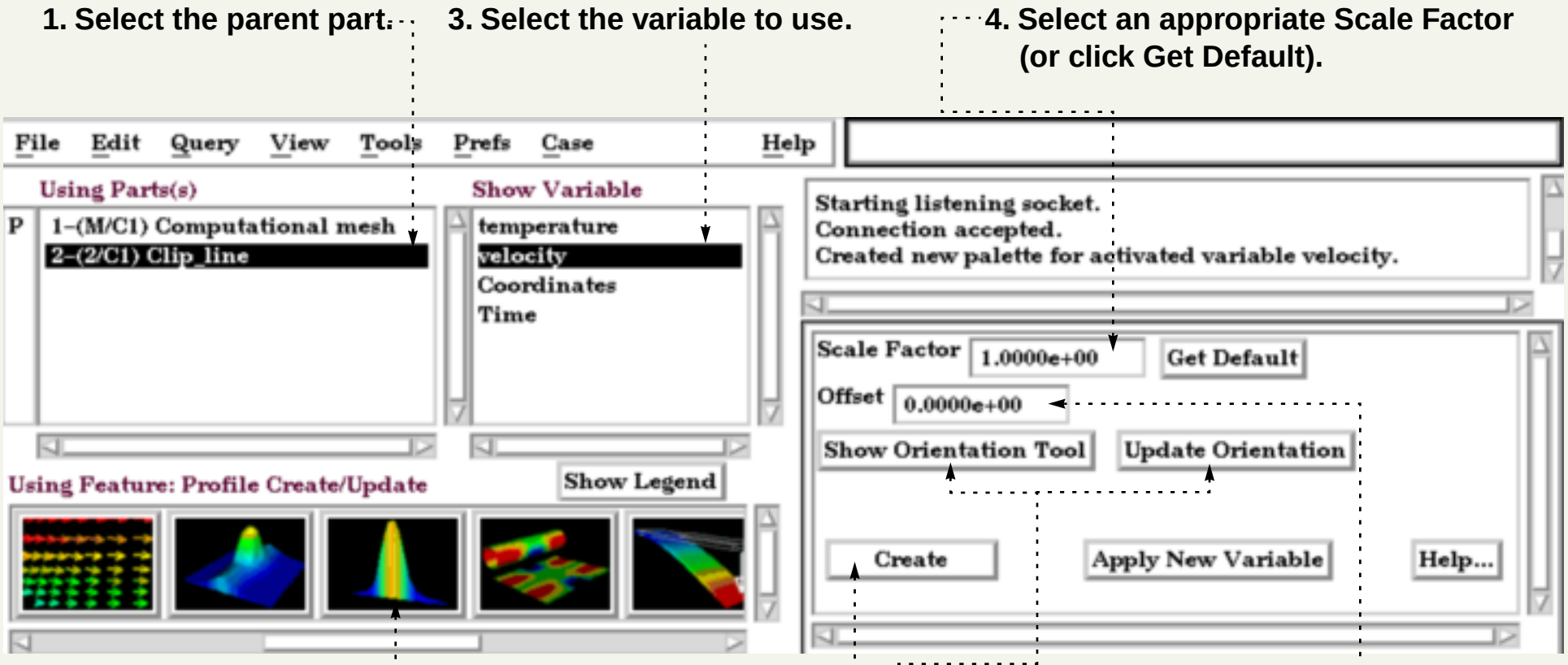
How To ... Create Profile Plots

Introduction

A profile plot is the 2D counterpart to an elevated surface: a projection away from a 1D part based on the value of a variable. Profile plots can be created on any 1D part: **clip lines**, **contours**, **particle traces**, or model parts consisting of 1D elements.

Basic Operation



For each node of the parent part, the corresponding node on the *profile curve* is determined by adding the value of the Offset to the selected variable and then multiplying the sum by the Scale Factor. The *projectors* of the profile are the lines that connect the nodes of the parent part to the nodes of the profile curve. The Plane tool is used to specify the orientation and direction of the projectors. The projectors are created parallel to the Plane tool projecting away from the center of the Plane tool (at least where the value of the selected variable plus the Offset is positive).

Although the parent part of a profile plot must be 1D, the nodes that make up the part do not have to be linear. For curved parents, the projectors of the resulting profile plot are still parallel, but they do not all lie in the same plane.

See Also

User Manual: **Profile Create/Update**